Claims

1. A rubber composition mainly comprising

(I) 0.5 to 35% by weight of a conjugated diene-based (co)polymer rubber having an amino group and an alkoxysilyl group on a polymer chain and having a weight average molecular weight of 1,000 to 90,000, and

(II) 99.5 to 65% by weight of a conjugated diene-based (co)polymer rubber having a weight average molecular weight of 100,000 to 2,000,000 (with the proviso that (I)+(II)=100% by weight).

2. The rubber composition according to claim1, wherein component (I) is represented by the following formula (1) or (2):

$$P_k\text{-}Si\text{-}\begin{cases}(R^1\text{-}NH_2)_n \\ (OR^2)_m \\ R^3_{4-(n+m+k)}\end{cases} \qquad (1)$$

wherein P is a (co)polymer chain comprising a conjugated diene alone or a conjugated diene and an aromatic vinyl compound, R^1 is an alkylene group having 1 to 12 carbon atoms, R^2 and R^3 are each independently an alkyl group having 1 to 20 carbon atoms or an aryl group, n is an integer of 1 or 2, m is an integer of 1 or 2, and k is an integer of 1 or 2, with the proviso that n+m+k is an integer of 3 or 4,

$$(NH_2\text{-}R^1\text{-}P)_j\text{-}Si\text{-}(OR^2)_h \qquad (2)$$
$$\qquad\qquad\qquad\qquad\qquad\qquad\quad |$$
$$\qquad\qquad\qquad\qquad\qquad\qquad\quad R^3{}_{4-(j+h)}$$

wherein P, R^1, R^2 and R^3 have the same definitions as given for the above-mentioned formula (1), j is an integer of 1 to 3, and h is an integer of 1 to 3, with the proviso that j+h is an integer of 2 to 4.

3. The rubber composition according to claim 1 or 2, wherein component (II) has at least one selected from the group consisting of an amino group, an alkoxysilyl group, an epoxy group, a hydroxyl group, a tin atom and silicon atom, on a polymer chain.

4. The rubber composition according to any one of claims 1 to 3, wherein the composition further contains an extending oil in an amount of 10 to 50 parts by weight based on 100 parts by weight of the total amount of components (I) and (II).

5. The rubber composition according to any one of claims 1 to 4, wherein the composition further contains silica and/or carbon black, and the content thereof is from 1 to 150 parts by weight based on 100 parts by weight of the total amount of the rubber components containing components (I) and (II).